UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,304	09/11/2003	Hong Sun	242418US2	3577

22850 7590 02/29/2008

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
PARK, CHAN S	

ART UNIT	PAPER NUMBER
2625	

NOTIFICATION DATE	DELIVERY MODE
02/29/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No.	Applicant(s)	
	10/659,304	SUN, HONG	
	Examiner	Art Unit	
	CHAN S. PARK	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 September 2007* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Chan S. Park

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/20/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. An initialed and dated copy of Applicant's IDS form 1449 filed on 12/20/05, is attached to the instant Office action.

Specification

2. The disclosure is objected to because of the following informalities:

Page 12, line 4, "one or two serveres 3" should be -- one or two servers 3 --.

Appropriate correction is required.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of the system comprising a plurality of scanners (claims 1 and 16) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

The following quotations of 37 § CFR 1.75(d)(1) is the basis of objection:

> (a) The specification must conclude with a claim particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention or discovery. The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description (See § 1.58(a)).

4. Claims 7 and 16-18 are objected to under 37 § CFR 1.75(d)(1) as failing to conform to the invention as set forth in the remainder of the Specification.

With respect to claims 7 and 18, the claims recite the limitation of system wherein the scanners are integrated in the server. However, referring to page 5, lines 10-11 & page 12, lines 2-6 of the Specification and figs. 1 & 8 of the Drawings, a single scanner is described to be integrated in a single server. Explanation as to how a plurality of scanners is integrated in a single server must be clearly stated in the Specification.

With respect to claim 16, it recites the limitation of a server having a first interface to which a plurality of printers and a plurality of scanners are connected. However, referring to page 16, lines 22-24 of the Specification, a single scanner 71 is connected

with the server 72 via the first interface ASIC 18. Explanation as to how a plurality of scanners is connected with the server via a first interface must be clearly stated in the Specification.

5. Claims are objected to because of the following informalities:

Claim 5, line 2, "based an Ethernet" should be -- based on an Ethernet --; and

Claim 12, line 3, "image data are" should be -- image data is --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3 and 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohara U.S. Patent No. 7,136,179.

With respect to claim 1, Ohara discloses an image processing multifunction system (printing system 100 in fig. 1) comprising:

a plurality of printers (printers 3a to 3m in col. 4, lines 25-26), a plurality of scanners (scanners 2a to 2l in col. 4, lines 22-23), and a server (printing management server 1 in col. 4, lines 15-20) connected to each other, wherein

each of the scanners acquires image data of a document (scanners reading an original and acquiring image data in col. 4, lines 22-23) and the server sends the image data acquired by the scanner to one of the printers for printing (the printing management server 1 outputting/sending the image data to a destination printer in col. 4, lines 50-56).

With respect to claim 2, Ohara discloses the image processing multifunction system according to claim 1, wherein each of the scanners includes an operation unit having a configuration (a touch panel in the scanner 2 in col. 5, lines 32-35) such that the scanner can be operated by operating the operation unit alone (the scanner performing the scan operation according to the instructions specified in the touch panel in col. 6, line 66 ~ col. 7, line 14).

With respect to claim 3, Ohara discloses the image processing multifunction system according to claim 1, wherein the number of the scanners (scanners 2a to 2l in col. 4, lines 22-23) is less than the number of the printers (printers 3a to 3m in col. 4, lines 25-26). It is apparent that there are fewer scanners 2a~2l (total of 12 scanners) than printers 3a to 3m (total of 13 printers).

With respect to claim 10, Ohara discloses the image processing multifunction system according to claim 1, wherein the printers have different printing performances

(the printers including a color printer and high speed monochrome printer in col. 6, lines 20-25 & lines 56-62).

With respect to claim 11, Ohara discloses the image processing multifunction system according to claim 10, wherein the different printing performances include at least one of a difference in image quality, a difference in printing speed, and a difference between color printing and monochrome printing (the printers including a color printer and high speed monochrome printer in col. 6, lines 20-25 & lines 56-62).

With respect to claim 12, Ohara discloses the image processing multifunction system according to claim 1, wherein the server (printing management server 1) includes

a printer selecting unit that selects a printer to which the image data is to be supplied (selecting an optimum printer among the printers specified by the operator in col. 8, lines 5-15).

With respect to claim 13, Ohara discloses the image processing multifunction system according to claim 12, wherein the printer selecting unit selects a printer that complies with a mode set by the operation unit of the scanner (note that the printing management server 1 selects the optimum printer among the printers specified by the operator in the "Best Fit" mode in col. 5, lines 62-64 & col. 8, lines 5-15. Thus, the optimum printer complies with a mode (Best Fit mode) set by the operation unit of the scanner.)

7. Claims 1, 4, 6 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. U.S. Patent Application No. 2002/0041386 (hereinafter Suzuki).

With respect to claim 1, Suzuki discloses an image processing multifunction system (print system in fig. 1) comprising:

a plurality of printers (printers 16 in fig. 1), a plurality of scanners (a scanner 12 in fig. 1 and a multifunction device 30, which is construed as another scanner, according to paragraph 236), and a server (server 14 in fig. 1) connected to each other, wherein

each of the scanners acquires image data of a document (scanner 12 reading image data according to paragraph 275 & the multifunction device reading image data according to paragraph 292, lines 14-19) and the server sends the image data acquired by the scanner (scanner 12) to one of the printers for printing (transmitting the image data to the printer via the server according to paragraph 281).

With respect to claim 4, Suzuki discloses the image processing multifunction system according to claim 1, wherein the scanners and the server are connected via a network (devices are connected via the network which is formed by the internet, a LAN or the like in paragraph 236, lines 8-10).

With respect to claim 6, Suzuki discloses the image processing multifunction system according to claim 4, further comprising a client that is connected to the network (client 18 in the print system in fig. 1 & paragraph 236, lines 7-8).

With respect to claim 19, Suzuki discloses a scanner (scanner 12 in figs. 1 & 2) comprising:

an interface (communication control unit 12F connecting the scanner with devices in the network in paragraph 237, lines 15-18) that is connected to a server (scanner 12 connected to a server 14 in fig. 1), wherein the server is connected with a network (server connected to a network in paragraph 245, lines 15-19) and a plurality of printers (printers 16 in fig. 1), manages (managing the printer attribute information in paragraphs 252-253) and controls the printers (controlling the printers by allowing/eliminating the printer selection based on the status/attribute information of each printers according to paragraphs 260-261);

a scanner engine (scanner portion 12A in paragraph 237, lines 1-3); and

an operation unit (display panel 12 B in paragraph 237, lines 3-9), wherein

when in a copying mode (selecting copy (printing) service button 200a in fig. 9 & paragraph 257), the scanner reads image data from a document via the scanner engine (in printing service mode according to fig. 7, scanner reads an original in paragraph 275) by operating the operation unit alone (operating the operation unit according to fig. 10), and supplies the image data to one of the printers via the server (transmitting the image data to the printer via the server according to paragraph 281).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as applied to claim 1 above, and further in view of Otake U.S. Patent No. 7,016,066.

With respect to claim 5, Suzuki discloses the image processing multifunction system according to claim 4, wherein the network is a local area network (paragraph 236, lines 8-10).

Suzuki, however, does not explicitly disclose that the local area network is based on an Ethernet communication system.

Otake, the same field of endeavor of the network printing/scanning art, discloses an image processing multifunction system comprising: a plurality of printers, a plurality of scanners, and a server connected to each other via a network (network devices connected via a network 1000 in fig. 1), wherein the network is a local area network based on an Ethernet communication system (col. 6, lines 30-31).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate the well known local area network based on the Ethernet communication system as taught by Otake into the printing/scanning network of Suzuki.

The suggestion/motivation for doing so would have been to provide a standard Ethernet communication system into the network of Suzuki in order to support/control the communication with other standard network devices in the Ethernet (col. 6, lines 29-35 of Otake).

facilitate the communication with other standard network devices.

Therefore, it would have been obvious to combine Suzuki with Otake to obtain the invention as specified in claim 5.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as applied to claim 1 above, and further in view of Sidiropoulos et al. U.S. Patent No. 6,127,669 (hereinafter Sidiropoulos).

With respect to claim 7, Suzuki discloses the image processing multifunction system according to claim 1, but it does not explicitly disclose that the scanner is integrated in the server.

Sidiropoulos discloses a plurality of scanners, wherein the scanners are integrated in a server (combining the scanners with the server into a single module in col. 4, lines 1-14).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the server of Suzuki to incorporate the scanners inside the server as taught by Sidiropoulos.

The suggestion/motivation for doing so would have been to eliminate the complicated wired and wireless links between the scanners and the server.

Therefore, it would have been obvious to combine Suzuki with Sidiropoulos to obtain the invention as specified in claim 7.

10. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki as applied to claim 1 above, and further in view of James et al. U.S. Patent No. 6,584,539 (hereinafter James).

With respect to claim 8, Suzuki discloses the image processing multifunction system according to claim 1, but it does not explicitly disclose that the server and the printers are connected via a bus bridge.

James, the same field of endeavor of connecting a server with printers via a network (col. 4, lines 1-13), discloses that a server and printers are connected via a bus bridge (server 102 connected to printers via bus bridge 170 in fig. 1 & col. 3, lines 52-56).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Suzuki to incorporate a bus bridge between the server and the printers as taught by James.

The suggestion/motivation for doing so would have been to provide a compatible connection between the server and printers that support different kinds of bus connections (col. 5, lines 1-17 of James). It would further enable the system of Suzuki to support other printers that support different bus connections.

Therefore, it would have been obvious to combine Suzuki with James to obtain the invention as specified in claim 8.

With respect to claim 9, James discloses the image processing multifunction system according to claim 1, but it does not disclose a data transmitting unit conforming

a high-speed serial interface standard, wherein the data transmitting unit connects the server with the bus bridge, and the bus bridge with the printers.

James, the same field of endeavor of connecting a server with printers via a network (col. 4, lines 1-13), discloses a data transmitting unit conforming a high-speed serial interface standard (a serial interface that complies with the IEEE 1394 in col. 4, lines 101-14), wherein the data transmitting unit connects the server with the bus bridge, and the bus bridge with the printers (connecting device according to IEEE 1394 standard serial bus in fig. 1 & 21-39).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the system of Suzuki to include a data transmitting unit conforming a high-speed serial interface standard to connect the server, the bus bridge and the printers as taught by James.

The suggestion/motivation for doing so would have been to allow high-speed/throughput communication between devices (col. 4, lines 60-67 of James).

Therefore, it would have been obvious to combine Suzuki with James to obtain the invention as specified in claim 9.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohara as applied to claim 12 above, and further in view of Fujiwara et al. U.S. Patent No. 6,804,022 (hereinafter Fujiwara).

With respect to claim 14, Ohara discloses the image processing multifunction system according to claim 12, but it does not explicitly disclose that the printer selecting unit selects a printer that is free.

Fujiwara, the same field of the server selecting a most appropriate printer for printing, discloses a server (server 2 in fig. 13) for selecting a printer that is free/unoccupied (server selecting the unoccupied printer in col. 13, line 63 ~ col. 14, line 7).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the printer selecting unit of Ohara to incorporate the method of selecting a printer that is free/unoccupied as taught by Fujiwara.

The suggestion/motivation for doing so would have been to provide a faster printing by making the printer selection based on the status report received by the server (col. 13, lines 51-62 of Fujiwara).

Therefore, it would have been obvious to combine Ohara with Fujiwara to obtain the invention as specified in claim 14.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohara as applied to claim 12 above, and further in view of Yacoub U.S. Patent Application Publication No. 2003/0011805.

With respect to claim 15, Ohara discloses the image processing multifunction system according to claim 12, wherein the operator at the scanners is notified when the printing of the print job is completed (col. 8, lines 16-21).

Ohara, however, does not explicitly disclose that the server includes a display controller that makes the operation unit of the scanner display the printer selected by the printer selecting unit.

Yacoub, the same field of endeavor of selecting the optimal printer and notifying the completion of the printing process, discloses a server selecting an optimal printer and notifying the operator of the location of the selected printer and the printed job (paragraph 31, lines 22-28).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the print completion notifying message of Ohara to include the printer location information as taught by Yacoub.

The suggestion/motivation for doing so would have been to inform the user of the printer location so that the user can pick up the printed job (paragraph 31, lines 22-28 of Yacoub).

Therefore, it would have been obvious to combine Ohara with Yacoub to obtain the invention as specified in claim 15.

13. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Tada et al. U.S. Patent No. 6,597,783 (hereinafter Tada).

With respect to claim 16, Suzuki discloses a server (server14 in fig. 4) comprising:

a first interface (communication control unit 14G in fig. 4 for connecting the server to the network 10 in paragraph 245 in lines15-20) to which a plurality of printers

(printers 16 in fig. 1) and a plurality of scanners (a scanner 12 in fig. 1 and a multifunction device 30, which is construed as another scanner, according to paragraph 236) are connected, wherein each of the scanners acquires image data of a document (scanner 12 reading image data according to paragraph 275 & the multifunction device reading image data according to paragraph 292, lines 14-19); wherein

the server sends the image data acquired by the scanner (scanner 12) to one of the printers for printing (transmitting the image data to the printer via the server according to paragraph 281).

Suzuki, however, does not explicitly disclose a server comprising a second interface to which a network is connected.

Tada, the same field of endeavor of a network server providing a communication link with other devices in the LAN (the CCM server 129 connected various network devices in col. 4, lines 7-10), discloses a server (CCM server 129) comprising a plurality of network interfaces (interface(s) 169, 173, 176 in fig. 2 & col. 4, lines 1-6).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the server of Suzuki to incorporate the plurality of network interfaces as taught by Tada.

The suggestion/motivation for doing so would have been to allow the server to communicate with other equipments linked to the LAN (col. 4, lines 7-10 of Tada).

Therefore, it would have been obvious to combine Suzuki with Tada to obtain the invention as specified in claim 16.

With respect to claim 17, Suzuki discloses the image processing multifunction system, wherein each of the scanners includes an operation unit (display panel 12B having an operation screen in paragraph 237, lines 3-9) having a configuration such that the scanner can be operated by operating the operation unit alone (scanning the document according to the user input, such as copy service or scanner service, according to paragraph 256 & network copy service in paragraph 292, lines 14-19).

14. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Suzuki and Tada as applied to claim 16 above, and further in view of Sidiropoulos.

With respect to claim 18, Suzuki discloses the image processing multifunction system according to claim 16, but it does not explicitly disclose that the scanner is integrated in the server.

Sidiropoulos discloses a plurality of scanners, wherein the scanners are integrated in a server (combining the scanners with the server into a single module in col. 4, lines 1-14).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the server of Suzuki to incorporate the scanners inside the server as taught by Sidiropoulos.

The suggestion/motivation for doing so would have been to eliminate the complicated wired and wireless links between the scanners and the server.

Therefore, it would have been obvious to combine three references to obtain the invention as specified in claim 18.

Contact Information

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S. PARK whose telephone number is (571) 272-7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chan S. Park
Examiner
Art Unit 2625

Chan S. Park

csp
February 14, 2008